

ORT-1508

Remarks

Claims 1-26 are presented for reconsideration.

By the above amendment, independent claims 1 and 14 been rewritten to include features supported in original claims 3 and 15 and at page 14, line 2, of the specification as originally filed. Minor clerical errors in claim 14 have also been corrected. Dependent claims 2 and 17 have been amended to recite a preferred feature as supported in the specification at page 14, lines 2-4. Claims 3, 15, and 25 have been amended to recite a preferred feature as supported in the specification, e.g., in the paragraph bridging pages 13 and 14 and in the examples. Dependent claims 4 and 12 have been amended to each recite a preferred feature as supported at page 14, lines 3-4, of the specification. The subject matter previously recited in claim 6 has been added to claim 5, and the dependency of claim 7 has been correspondingly amended. Claim 6 has been amended to recite a preferred feature as supported in the specification at page 14, lines 5-8. Dependent claim 16 has been amended by incorporating the feature previously recited in claim 17. Independent claim 24 has been amended to recite subject matter as supported in the specification, e.g., at page 14, lines 11-19 and in original claim 25.

The Form PTO-326 included in the outstanding Office Action indicates that the specification and drawings have been objected to. Since the Examiner did not explain the basis for the objections, the specification and drawings have not yet been amended. If the Examiner maintains the objections, Applicant respectfully requests that the

ORT-1508

Examiner provide detailed grounds for each objection in the next Office Action so that Applicant may make an informed response.

The Examiner objected to original claims 3, 6, and 15 as containing informalities. In particular, the Examiner requested that Applicant use Markush-type language to recite alternative species for a recited feature rather than the language used in these original claims. Applicant notes that, although the Examiner may prefer Markush-type language, the original language used to recite alternative species is clear. In any event, the above amendments to claims 3, 6, and 15 have rendered this objection moot.

The Examiner rejected original claims 1-26 under 35 U.S.C. § 102(e) as being clearly anticipated by Linsley et al. (US 6,271,002). This rejection is respectfully traversed.

The Linsley et al. reference fails to teach or suggest a method or kit for synthesizing a second strand of DNA by contacting a thermostable DNA polymerase with a thermostable RNase H under conditions conducive to thermostable DNA polymerase activity. To better delineate this patentable distinction of the claimed methods and kits, independent claims 1, 14, and 24 have been amended to define the thermostable DNA polymerase as being selected from Bst DNA polymerase large fragment, Bst DNA polymerase native enzyme, Taq DNA polymerase, Pfu DNA polymerase, Tgo DNA polymerase, Phi29 DNA polymerase plus trehalose, T7 DNA polymerase plus trehalose, Klenow fragment of E. coli polymerase plus trehalose, and native E. coli DNA polymerase I plus trehalose. In contrast, the Linsley et al. patent discloses second

ORT-1508

strand DNA synthesis by a method known in the art (see col. 14, lines 66-67). Thus, like the background discussion in the present specification at page 13, lines 18-20, the Linsley et al. patent describes the use of conventional DNA polymerases for second strand synthesis, namely, E. coli DNA polymerase I, Klenow fragment of E. coli DNA polymerase I, and T4 DNA polymerase (see Linsley et al., e.g., col. 16, lines 11-14; col. 41, lines 27-29). Independent claims 1, 14, and 24 are therefore patentable over Linsley et al.


That the Linsley et al. reference neither teaches nor suggests the use of thermostable DNA polymerases is further evident from its disclosure of an incubation temperature such as 37°C (col. 16, lines 5-8) for second strand synthesis, which is significantly below the temperature range of 45-80°C now expressly recited in method claims 1 and 14. Thus, the reference fails to teach or suggest the temperature range recited in independent claims 1 and 14, let alone the preferred range recited in dependent claims 2 and 17. Accordingly, claims 2 and 17 further distinguish over Linsley et al.

In view of the foregoing, all of the claims are allowable. Applicant therefore requests prompt and favorable action.

In the event any fees are required for the filing of this Amendment, please charge all necessary fees to Deposit Account No. 10-0750.

Respectfully submitted,

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Page 11